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Serial No. 10/751,390
Response to Official Action

In the Drawings

There are no amendments to the drawings.

Remarks

Applicant has added new claims 14-17. Applicant respectfully submits that no new matter was added by the amendment, as all of the amended matter was either previously illustrated or described in the drawings, written specification and/or claims of the present application. Entry of the amendment and favorable consideration thereof is earnestly requested.

Claim 1 requires among other limitations: a high-frequency-heated substrate holder made from conductive material for holding the substrate with surface-to-surface contact, which substrate holder has a zone of higher electrical conductivity, characterized in that the zone of higher electrical conductivity is associated with the supported surface of the substrate.

Claim 14 requires among other limitations: a high-frequency heater for heating said substrate holder to thereby heat the substrate, a first substrate holder zone formed of a material exhibiting a first electrical conductivity, a second substrate holder zone formed of a material exhibiting a second electrical conductivity, said first electrical conductivity being higher than the second electrical conductivity and said first substrate holder zone directly contacting the substrate such that an increased amount of energy is transferred to the substrate from said first substrate holder zone than from said second substrate holder zone.

35 U.S.C. §102(b) Rejections

Applicant respectfully submits that European Patent EP0519608 (“Lum et al.”) fails to disclose “a high-frequency-heated substrate holder” or that the “substrate holder has a zone of higher electrical conductivity” as required by Claim 1. For example, Lum et al. discloses “a body of thermally anisotropic material having a surface of relatively high thermal conductivity.” (Col. 5, lines 12-14.) This is not an insignificant difference because Lum et al. further discloses that the substrate holder is heated by infrared lamps from below and that thermal conductivity transverse to the surface is relatively low leading to a reduced energy transport from the lamps. Nowhere does Lum disclose a zone of higher electrical conductivity or heating by high-frequency as required by Claim 1.

Applicant further notes that Lum et al. also fails to disclose zones of first and second electrical conductivities or that one of the zones has a higher electrical conductivity than the other, and a high-frequency heater as required by Claim 14. Rather, as stated above Lum et al. is limited to disclosing a body of thermally anisotropic material and uses infrared lamps, not a high-frequency heater.

Accordingly, Applicant respectfully submits that neither Claim 1 nor Claim 14 is anticipated by Lum et al.

Applicant respectfully submits that U.S. Patent No. 3,783,822 (“Wollam”) also fails to disclose that the “substrate holder has a zone of higher electrical conductivity” as required by Claim 1 or zones of first and second electrical conductivities or that one of the zones has a higher electrical conductivity than the other, and a high-frequency

heater as required by Claim 14. Rather, Wollam discloses that “plates 46 and 47” comprise homogeneous materials with no zones having different electrical conductivity as required by Claims 1 and 14. (Col. 5, lines 66-67.) The Examiner has submitted that Wollam discloses a “zone 102” in Figure 6. (Official Action 1/11/06, p. 3.) Applicant respectfully submits that Wollam discloses a “heating plate 68” that heats the discs, which has a “disc-shaped protuberance such as 102 on the disc 60.” (Col. 6, line 61 – Col. 7, line 3; Col. 8, lines 2-3.) Nowhere however, does Wollam disclose an area of higher electrical conductivity as required by the claims.

Accordingly, Applicant respectfully submits that neither Claim 1 nor Claim 14 is anticipated by Wollam.

35 U.S.C. §103(a) Rejections

Applicant respectfully submits that none of the cited prior art teaches, discloses or suggests a substrate holder having a zone of higher electrical conductivity as required by the claims.

For example, as stated above, Lum et al. is limited to teaching “a body of thermally anisotropic material having a surface of relatively high thermal conductivity.” (Col. 5, lines 12-14.) Nowhere does Lum et al. teach a zone of higher electrical conductivity. Additionally, Wollam teaches use of heating plates that have comprise homogeneous materials with no zones having different electrical conductivity.

Applicant further respectfully submits that U.S. Patent No. 6,368,404 (“Gurary”) also fails to teach, disclose or suggest a zone of higher electrical conductivity and the Examiner has not cited Gurary as teaching this limitation. Rather, Gurary teaches that

the substrate holder is made from a homogenous material as noted by the Examiner.

(Col. 6, lines 50-55.)

Accordingly, Applicant respectfully submits that pending Claims 1 and 14 cannot be obvious in view of the cited prior art either alone or in any combination because none of the cited art fails to teach, disclose or suggest a zone of higher electrical conductivity as required by Claims 1 and 14.

It is well settled that the mere fact that references can be modified does not render the resultant modification obvious unless the prior art also suggests the desirability of the modification. See, e.g., MPEP 2143.01; *In re Mills*, 916 F.2d 680, 682, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990) (fact that prior art “may be capable of being modified to run the way the apparatus is claimed, there must be some suggestion or motivation in the reference to do so.”). In the present case, Applicant respectfully submits that Lum et al. teaches providing a body of thermally anisotropic material, not a zone of higher electrical conductivity. This is not an insignificant difference. Lum et al. is directed to a device that utilizes infrared lamps to heat the substrate stating that a “bank of infrared lamps 13 are located around the bottom portion of the cylindrical tube 10 controlled by a thermocouple (not shown) embedded in susceptor block 12.” (Col. 2, line 56 – Col. 3, line 1; See Col. 3, lines 9-13.) There is no motivation to discard the heating means taught in Lum et al. in favor of the high-frequency heater required by Claims 1 and 14. Rather, Applicant respectfully submits that the only motivation to make such a modification are the presently pending claims, which is inappropriate. *In re Oetiker*, 977 F.2d, 1443, 1447 (Fed. Cir. 1992) (“There must be some reason, suggestion,

or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That knowledge can not come from the applicant's invention itself."); See also *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991) (suggestion to combine or modify must be found in the prior art, not the applicant's disclosure).

Accordingly, Applicant respectfully submits that, because there is no suggestion found in the prior art to modify the prior art according to the presently pending claims, Claims 1 and 14 cannot be obvious.

It is respectfully submitted that claims 1-17, all of the claims remaining in the application, are in order for allowance and early notice to that effect is respectfully requested.

Respectfully submitted,

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